



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

AFFIDAVIT

Commissioner of Patents and Trademarks Washington, D.C. 20231

Commissioner:

- I, Robert E. Schneider, herewith affirm as follows.
- (A) I was born on November 22, 1943; and I am a U.S. Citizen.
- (B) I presently live at 1015 Central Avenue, Wilmette, Illinois 60091.
- (C) In June 1966 I received a Bachelor's Degree in Electrical Engineering from Northwestern University, Evanston, Illinois; and
- in June 1971 I received a Master's Degree in Electrical Engineering from Illinois Institute of Technology, Chicago, Illinois.
- (D) I have practiced Electrical and Electronics Engineering since June 1966, as follows.
- 1. Between June 1966 and December 1968, as a Junior Engineer, I did engineering design work on class B stepped and quasi-squarewave inverters at Vapor Corporation of Chicago, Illinois.

- 2. Between December 1968 and February 1970, as a Project Engineer, I did engineering design work related to power supplies and waveshaping circuits at SCM Kleinschmidt, Deerfield, Illinois.
- 3. Between March 1970 and January 1974, as Senior Project Engineer at Vapor Corporation of Chicago, Illinois, I was responsible for projects related to the design of aircraft controls and power supplies.
- 4. Between January 1974 and October 1976, as Program Manager at SCM Kleinschmidt in Deerfield, Illinois, I was responsible for design activities related to a microcomputer-controlled optical character reader.
- 5. Between November 1976 and August 1977, as Manager of design Engineering at Norlin Music in Lincolnwood, Illinois, I directed engineering activities related to the design of computer-based music instruction systems.
- 6. Between September 1977 and August 1979, as Group Manager at Extel Corporation in Northbrook, Illinois, I directed the activities of six engineers engaged in electronic product design activities.
- 7. Between September 1979 and January 1983, as Product Manager at Bell & Howell Company in Skokie, Illinois, I was responsible for the marketing of the Company's computer products.
- 8. Since January 1983 I have been in business for myself doing design and development work related to high frequency power supplies, microcomputer systems, and HVAC controls. During this period, about one third of my time has been spent on the design, development and contruction of high frequency inverter-type power supplies, including ballasts for fluorescent lamps.
- (E) In total, I have spent more than 10 years in the design, development, construction, testing and evaluation of electronic power supplies in general and electronic inverter-type power supplies in particular, and I have accumulated substantial experience in the art of power supplies, particularly electronic inverter-type power supplies and electronic inverter-type ballasts for fluorescent lamps.

Consequently, I believe I have at least ordinary skill in the art of electronic inverter-type power supplies and electronic inverter-type ballasts for gas discharge lamps.

(F) I have read, and I am familiar with the teachings of, each one of the prior art references identified on page 3 hereof.

Prior Art References

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* U.S. Patent No. 1,292,659 to Speed;
* U.S. Patent No. 2,587,169 to Kivari;
* U.S. Patent No. 2,923,856 to Greene et al.;
* U.S. Patent No. 2,965,856 to Roesel;
* U.S. Patent No. 3,368,164 to Shapiro;
* U.S. Patent No. 3,496,518 to Neumann et al.;
* U.S. Patent No. 3,525,012 to Dimitracopoulos et al.;
* U.S. Patent No. 3,679,931 to Powell;
* U.S. Patent No. 3,681,654 to Quinn;
* U.S. Patent No. 3,710,177 to Ward;
* U.S. Patent No. 3,727,104 to Neal et al.;
* U.S. Patent No. 3,801,865 to Roberts;
* U.S. Patent No. 3,835,333 to Balan;
* U.S. Patent No. 3,868,561 to Matthes;
* U.S. Patent No. 3,939,362 to Grimes et al.;
* U.S. Patent No. 3,996,493 to Davenport et al.;
* U.S. Patent No. 4,008,414 to Agnew;
* U.S. Patent No. 4,057,750 to Elms et al.;
* U.S. Patent No. 4,104,715 to Lawson;
* U.S. Patent No. 4,151,445 to Davenport et al.;
* U.S. Patent No. 4,184,128 to Nilssen;
* U.S. Patent No. 4,207,497 to Capewell et al.;
* U.S. Patent No. 4,207,498 to Spira et al.;
* U.S. Patent No. 4,262,327 to Kovacik et al.;

* U.S. Patent No. 4,277,726 to Burke;

* U.S. Patent No. 4,293,799 to Roberts;
* U.S. Patent No. 4,295,079 to Otsuka et al.;
* U.S. Patent No. 4,300,073 to Skwirut et al.;
* U.S. Patent No. 4,307,353 to Nilssen;
* U.S. Patent No. 4,330,736 to Perper;
* U.S. Patent No. 4,347,460 to Latassa et al.;
* U.S. Patent No. 4,354,120 to Schornack;
* U.S. Patent No. 4,367,434 to Miller;
* U.S. Patent No. 4,386,292 to Rothwell et al.;
* U.S. Patent No. 4,406,976 to Wisbey et al.;
* U.S. Patent No. 4,414,617 to Galindo;
* U.S. Patent No. 4,438,372 to Zuchtriegel;
* U.S. Patent No. 4,443,778 to Mewissen;
* U.S. Patent No. 4,463,277 to DeCaro; 
* U.S. Patent No. 4,464,606 to Kane;
* U.S. Patent No. 4,499,403 to Leppelmeier et al.;
* U.S. Patent No. 4,503,363 to Nilssen;
* U.S. Patent No. 4,504,895 to Steigerwald; * U.S. Patent No. 4,507,698 to Nilssen;
* U.S. Patent No. 4,508,996 to Clegg et al.;
* U.S. Patent No. 4,538,095 to Nilssen;
* U.S. Patent No. 4,560,908 to Stupp et al.;
* U.S. Patent No. 4,613,943 to Pacholok;
* U.S. Patent No. 4,684,850 to Stevens;
* U.S. Patent No. 4,731,551 to Gibbs et al;
  Canadien Patent No. 633,937 to Waller et al.
  Japanese Patent No. 57-135689 to Matsushita;
  (Abstract Only)
 Pages 44-50, IEEE Spectrum, February, 1969: "Lethal
  electric currents" by Dalziel;
* Pages 130-133, PCI April 1983 PROCEEDINGS, by Baker;
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(G) I have been informed to the effect that:

- (1) the Commissioner rejected certain claims in an application for a patent for the reason that the Commissioner held the claimed invention to be obvious over prior art;
- (2) as evidence of obviousness, the Commissioner cited the following prior art reference, a copy of which has been received by me:
 - U.S. Patent No. 2,587,169 to Kivari;
- (3) the Commissioner held that the teachings of the Kivari patent, when combined with known prior art, rendered the claimed invention obvious;
- (4) more particularly, the Commissioner held that by making -- in view of known prior art -- a desirable obvious modification and/or adaptation of the teachings of the Kivari patent the claimed invention would result;
- (5) in other words, the Commissioner held that -- in view of known prior art -- the claimed invention merely constitutes an obvious modification and/or adaptation of the teachings of the Kivari patent.
- (H) I have not seen the application for patent identified in section (G) above, nor have I seen the claims thereof. More particularly, I have not received a description of the claimed invention.
 - (I) I have been requested:
- (1) to carefully study and consider the cited reference in light of the situation described in section (G) above;
- (2) to identify each and every instance of what -- in view of known prior art -- I see as a desirable obvious modification and/or adaptation of Kivari's teachings;
- (3) to express in writing each one of those desirable obvious modifications and/or adaptations.

- (J) I have performed the study and consideration requested of me in section (I) above, having spent therefor an amount of time that I judged to be reasonable; and I herewith set forth in writing each and every one of those desirable obvious modifications and/or adaptations, as follows:
- (1) Kivari claims that using a voltage reducing transformer will reduce the detrimental effects of line surges. His reasoning leads me to belive that he is a mechanical engineer. But smoothing out line fluctuations is desirable and perhaps could be accomplished by increasing the inductance of the transformer.
- (2) A constant voltage transformer would reduce line fluctuations to a minimum but I hardly think its cost could be justified. In fact, the use of Kivari's lamp as described for "ordinary house-lighting circuits" doesn't make sense to me.

Pohert E Schnoider

STATE OF ILLINOIS)

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COUNTY OF COOK

SEAL

Suptember, 1989.

ELIZABETH J. WARNER My Commission Expires 11/20/59 otary Public

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